

What is claimed is:

1. A conjugate fiber with an optical interference color-generating function, having an alternating laminated section with a thickness of no greater than 10 μm , wherein alkali-insoluble polymer layers with different refractive indices are alternately laminated parallel to the long axis direction of the flat cross-section and the ratio (SP ratio) between the solubility parameter value of the higher refractive index polymer (SP1) and the solubility parameter value of the lower refractive index polymer (SP2) is in the range of $0.8 \leq \text{SP1/SP2} \leq 1.1$, is covered with an alkali-soluble polymer with a thickness of 2.0 μm or greater.

2. A conjugate fiber with an optical interference color-generating function according to claim 1, wherein the alternating laminated section is covered with a protective layer having a thickness of 0.1-3.0 μm composed of an alkali-insoluble polymer.

3. A conjugate fiber with an optical interference color-generating function according to claim 1 or 2, wherein the number of layers of the alternating laminated section is 10 or greater, and the flatness ratio of the flat cross-section is 3.5 or greater.

4. A conjugate fiber with an optical interference color-generating function according to any one of claims 1 to 3, wherein the alkali-soluble polymer is polylactic acid, polyethylene terephthalate or polybutylene terephthalate copolymerized with polyethylene glycol, or polyethylene terephthalate comprising polyethylene glycol and/or an alkali metal alkylsulfonate, or polyethylene terephthalate or polybutylene terephthalate copolymerized with polyethylene glycol and/or a dibasic acid component having a metal sulfonate group.

5. A textile having an optical interference color-

generating function, and produced by weaving a conjugate fiber having an optical interference color-generating function according to any one of claims 1 to 4, and then treating it with an aqueous alkali solution.

6. Cut fibers having an optical interference color-generating function, and produced by cutting a conjugate fiber having an optical interference color-generating function according to any one of claims 1 to 4, in such a manner that the fiber length in the fiber axis direction is longer than the short axis direction of the fiber cross-section, ignoring the alkali-soluble polymer section.

7. Cut fibers having an optical interference color-generating function, and produced by treating cut fibers according to claim 6 with an aqueous alkali solution.

8. Cut fibers having an optical interference color-generating function, and produced by treating a conjugate fiber having an optical interference color-generating function according to any one of claims 1 to 4 with an aqueous alkali solution to remove the alkali-soluble polymer, and then cutting it in such a manner that the fiber length in the fiber axis direction is longer than the short axis direction of the fiber cross-section.